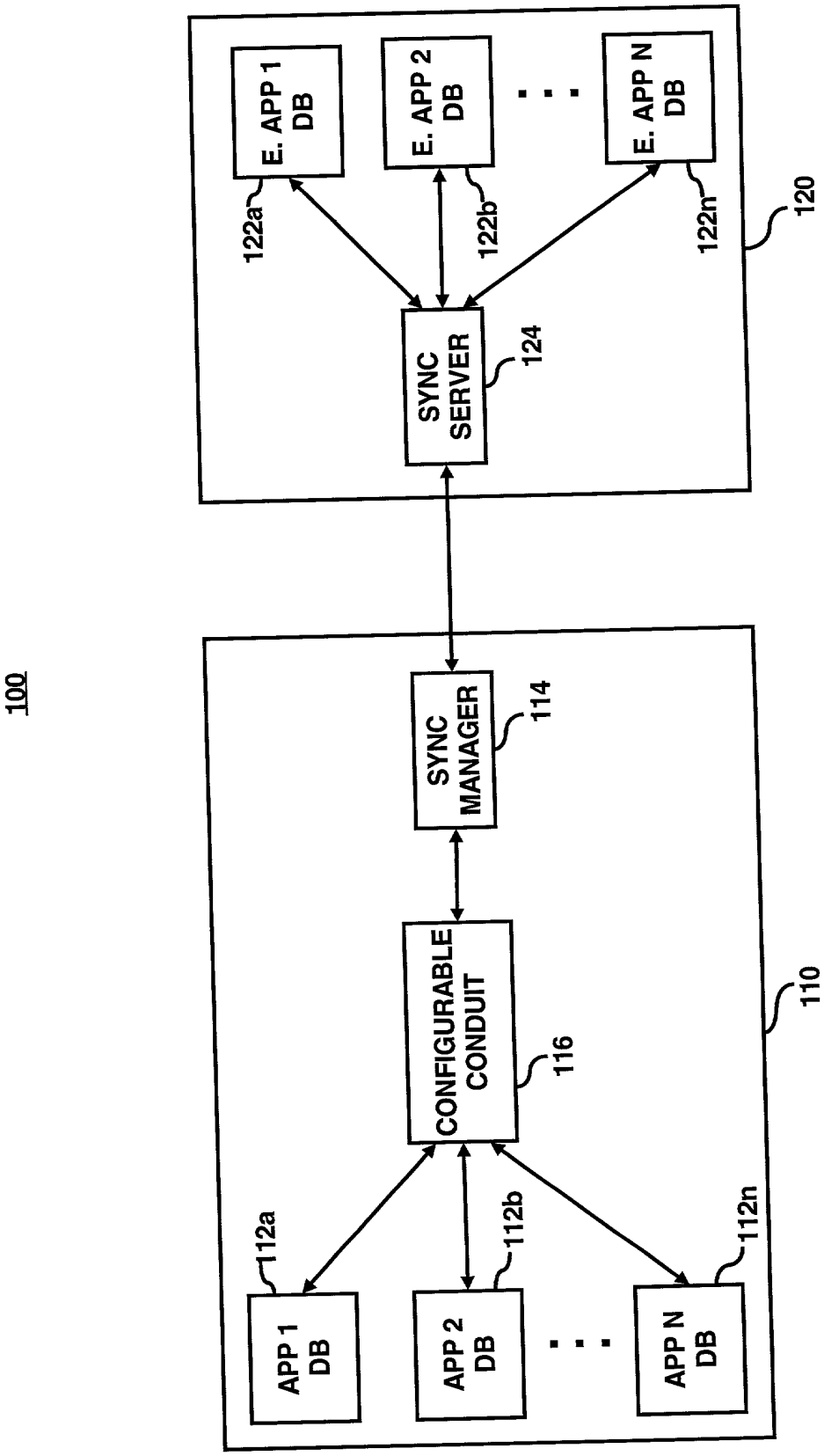
100
E. APP 1 DB
E. APP 2 DB
E. APP N DB
122a
122b
122n
120
SYNC SERVER
124
SYNC MANAGER
114
CONFIGURABLE CONDUIT
116
110
112a
112b
112n
APP 1 DB
APP 2 DB
APP N DB

FIG. 1

Express Mail Label No. EV339976245US

200

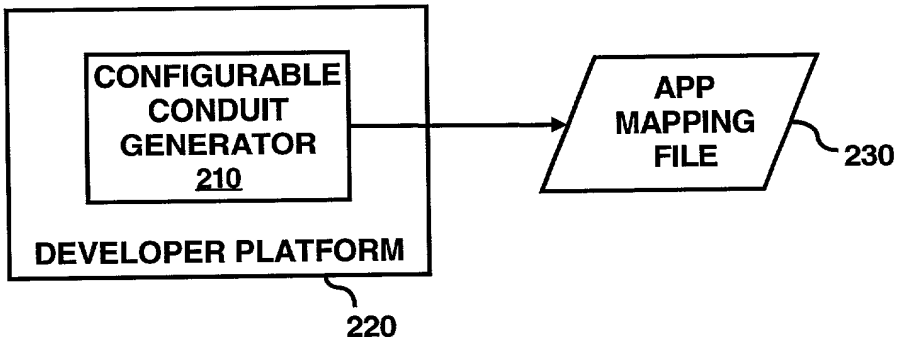

FIG. 2

300

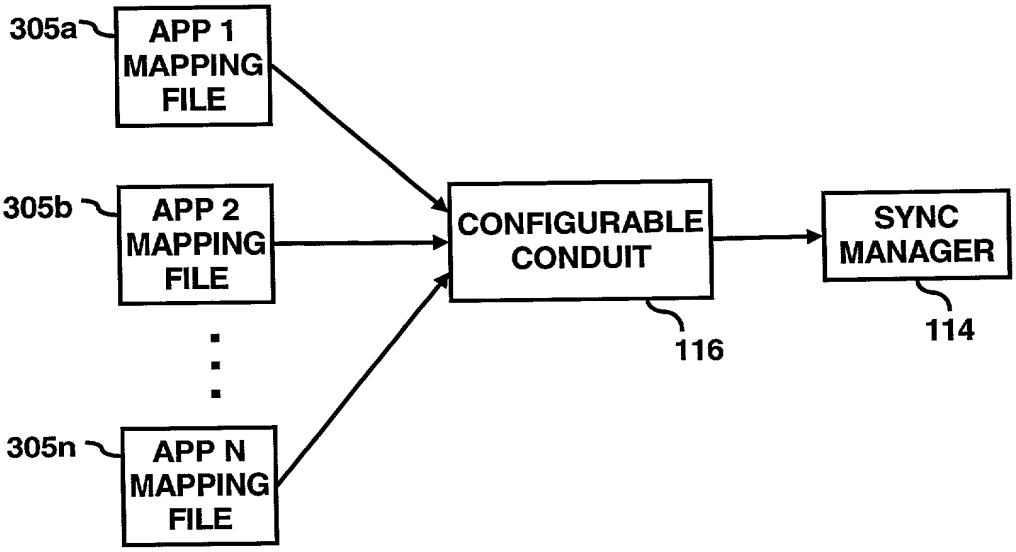

FIG. 3

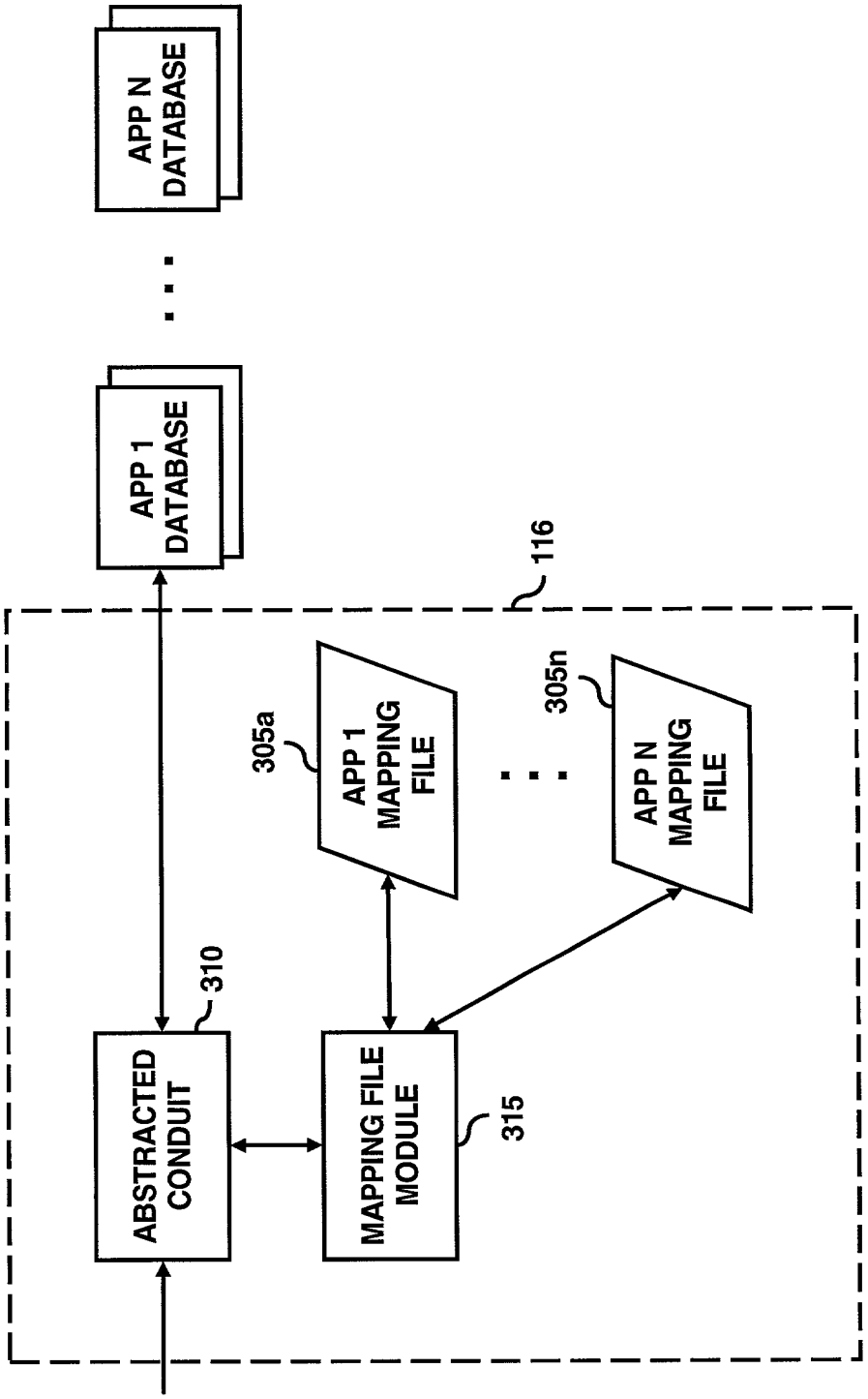
APP N DATABASE
APP 1 DATABASE
116
305a
APP 1 MAPPING FILE
305n
APP N MAPPING FILE
310
ABSTRACTED CONDUIT
MAPPING FILE MODULE
315

FIG. 3B

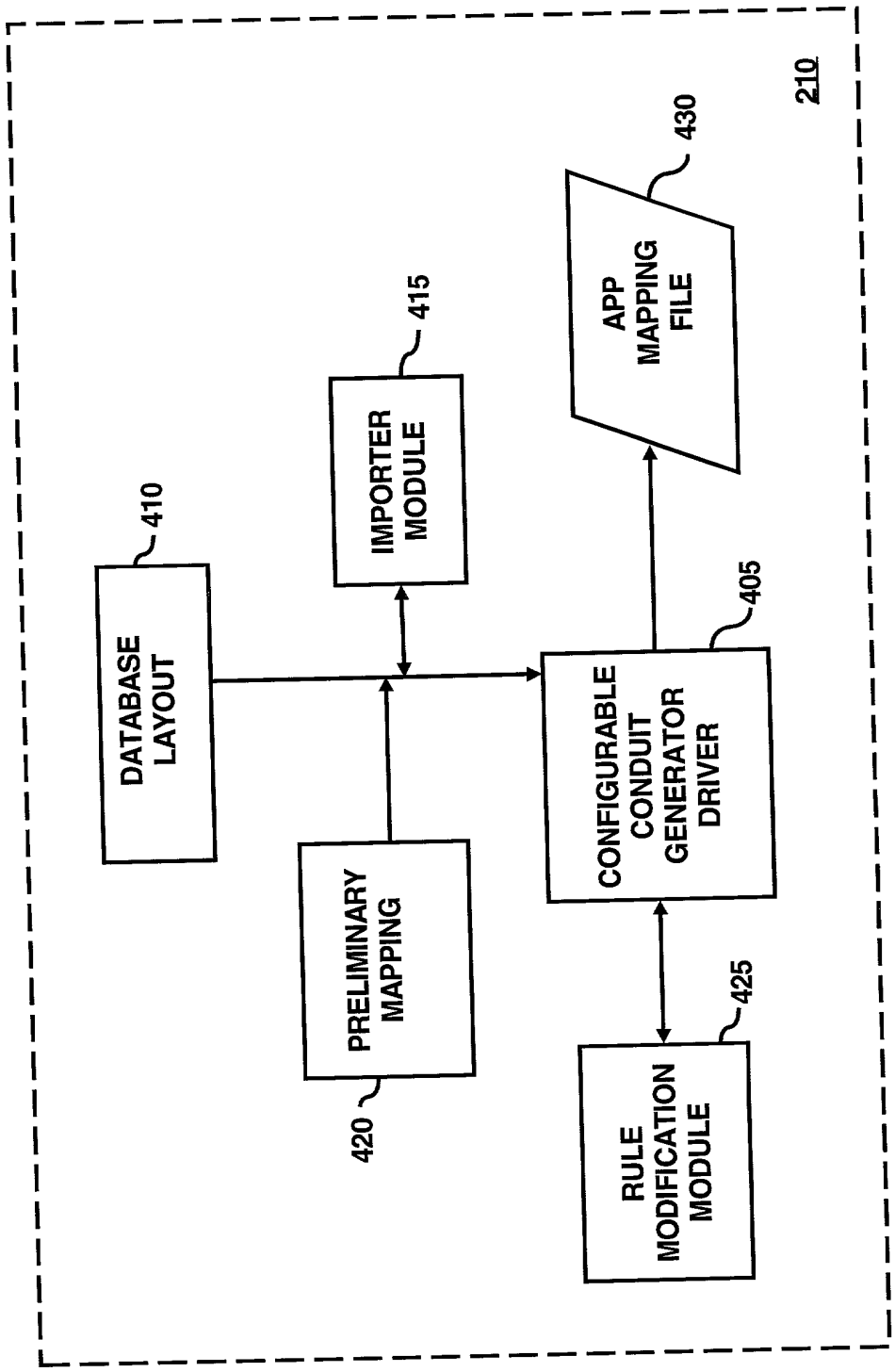
210
430
APP MAPPING FILE
415
IMPORTER MODULE
410
DATABASE LAYOUT
405
CONFIGURABLE CONDUIT GENERATOR DRIVER
PRELIMINARY MAPPING
420
425
RULE MODIFICATION MODULE

FIG. 4

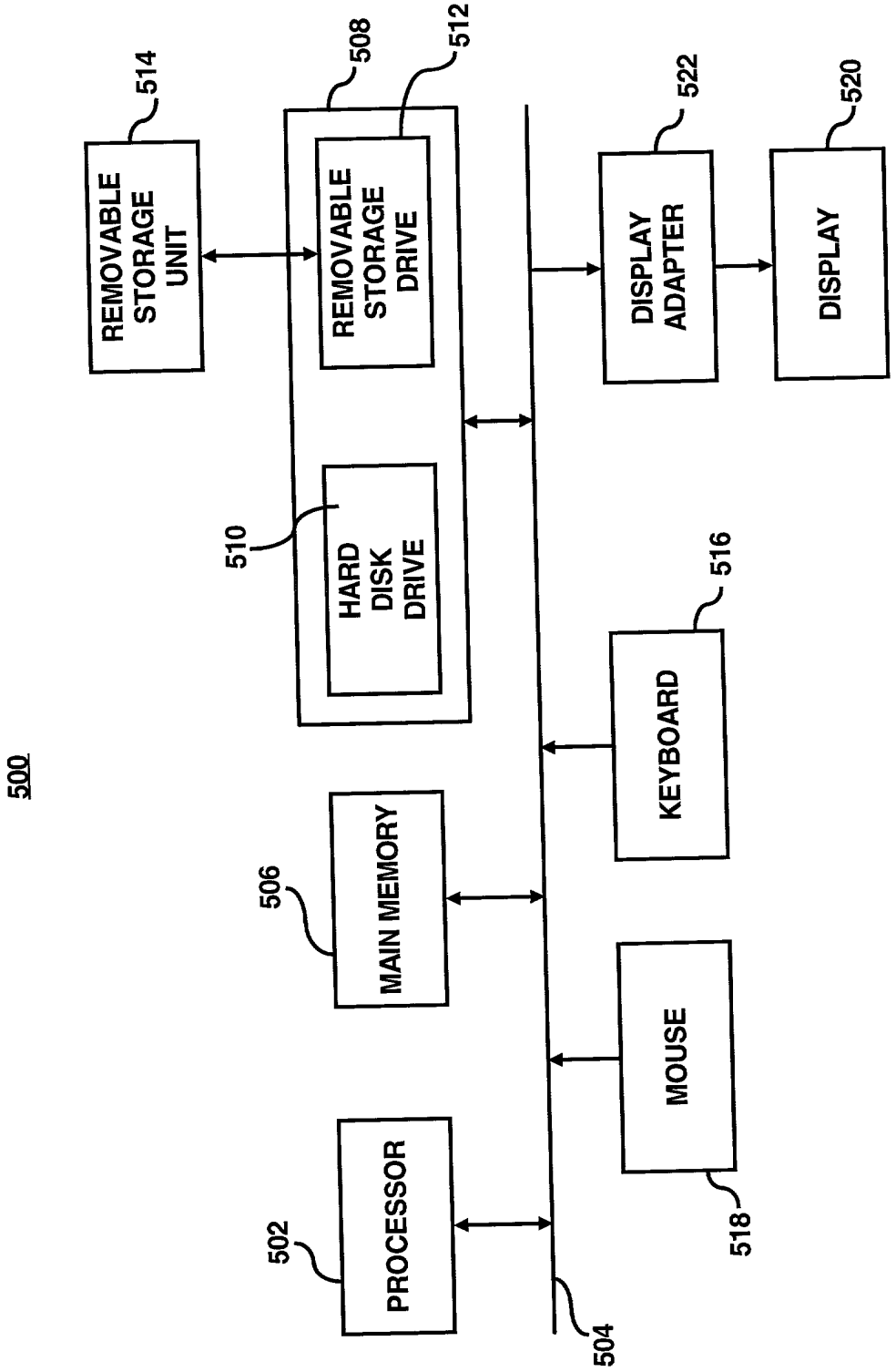
500
REMOVABLE STORAGE UNIT
514
REMOVABLE STORAGE DRIVE
508
512
HARD DISK DRIVE
510
DISPLAY ADAPTER
522
DISPLAY
520
KEYBOARD
516
MAIN MEMORY
506
MOUSE
518
PROCESSOR
502
504

FIG. 5

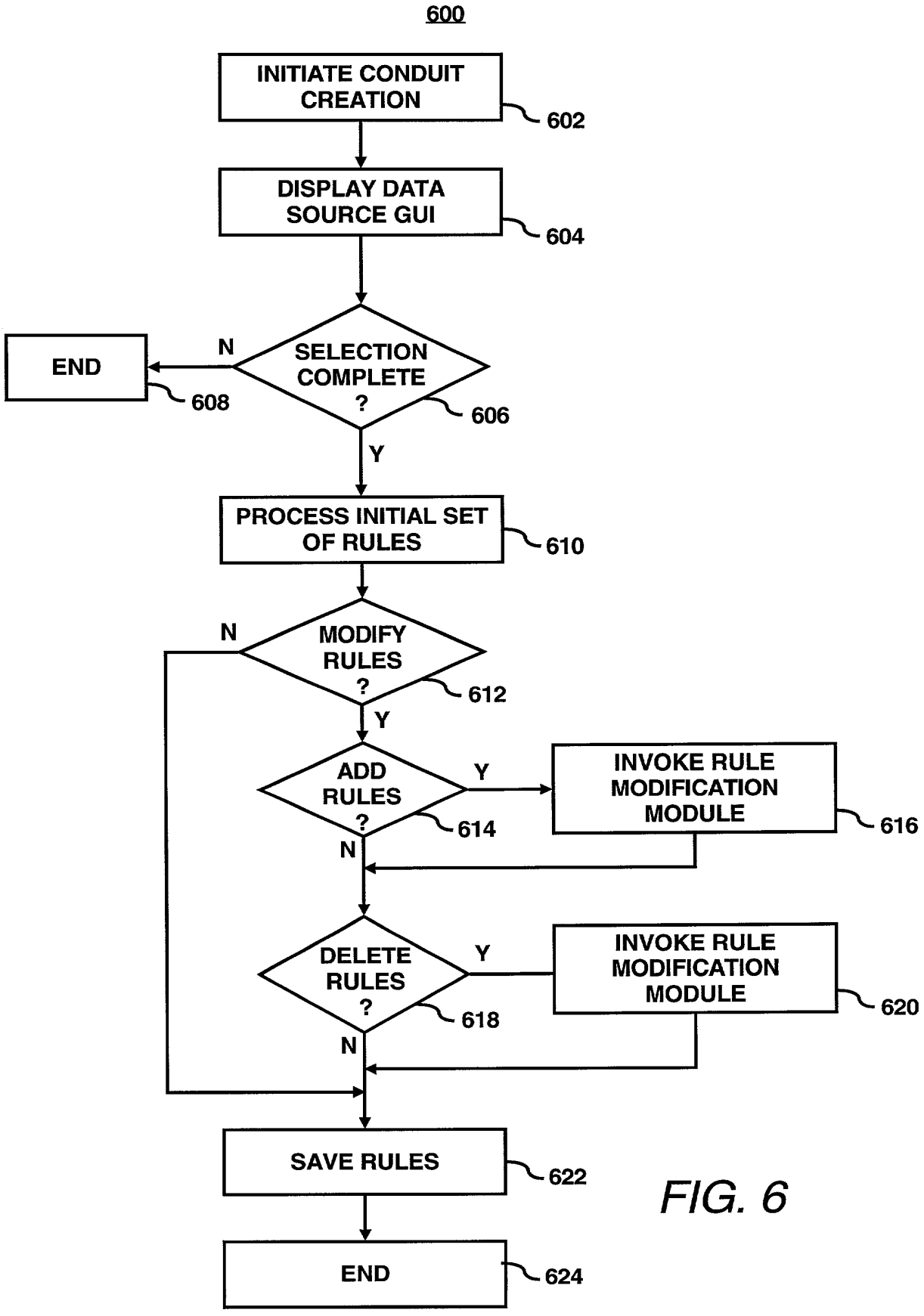
600
INITIATE CONDUIT CREATION
602
DISPLAY DATA SOURCE GUI
604
SELECTION COMPLETE ?
606
N
END
608
Y
PROCESS INITIAL SET OF RULES
610
MODIFY RULES ?
612
N
Y
ADD RULES ?
614
Y
INVOKE RULE MODIFICATION MODULE
616
N
DELETE RULES ?
618
Y
INVOKE RULE MODIFICATION MODULE
620
N
SAVE RULES
622
END
624

FIG. 6

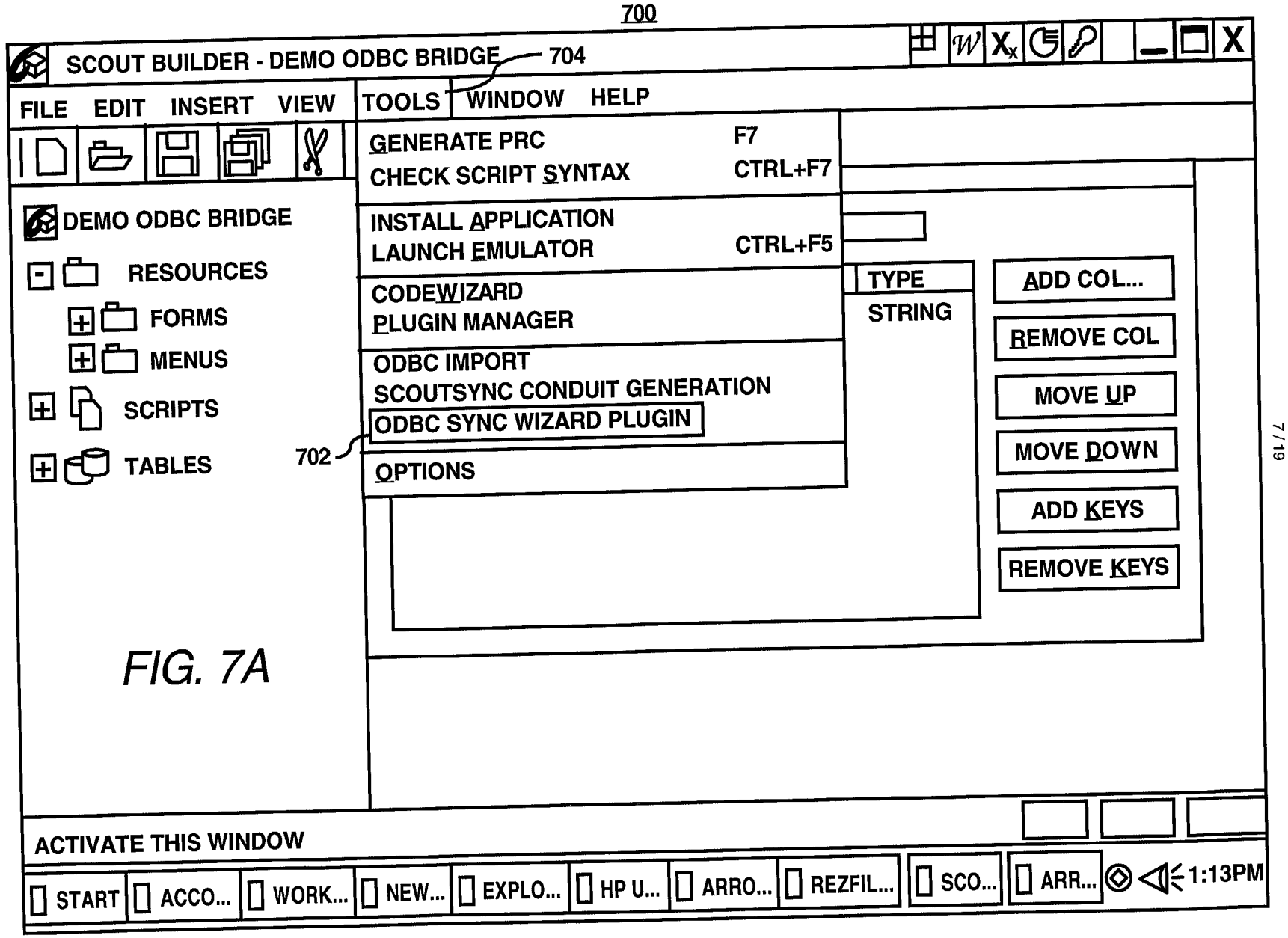
700
SCOUT BUILDER - DEMO ODBC BRIDGE
704
FILE EDIT INSERT VIEW
TOOLS WINDOW HELP
GENERATE PRC F7
CHECK SCRIPT SYNTAX CTRL+F7
INSTALL APPLICATION
LAUNCH EMULATOR CTRL+F5
CODEWIZARD
PLUGIN MANAGER
ODBC IMPORT
SCOUTSYNC CONDUIT GENERATION
ODBC SYNC WIZARD PLUGIN
OPTIONS
DEMO ODBC BRIDGE
RESOURCES
FORMS
MENUS
SCRIPTS
TABLES
702
TYPE
STRING
ADD COL...
REMOVE COL
MOVE UP
MOVE DOWN
ADD KEYS
REMOVE KEYS
ACTIVATE THIS WINDOW
START
ACCO...
WORK...
NEW...
EXPLO...
HP U...
ARRO...
REZFIL...
SCO...
ARR...
1:13PM

FIG. 7A

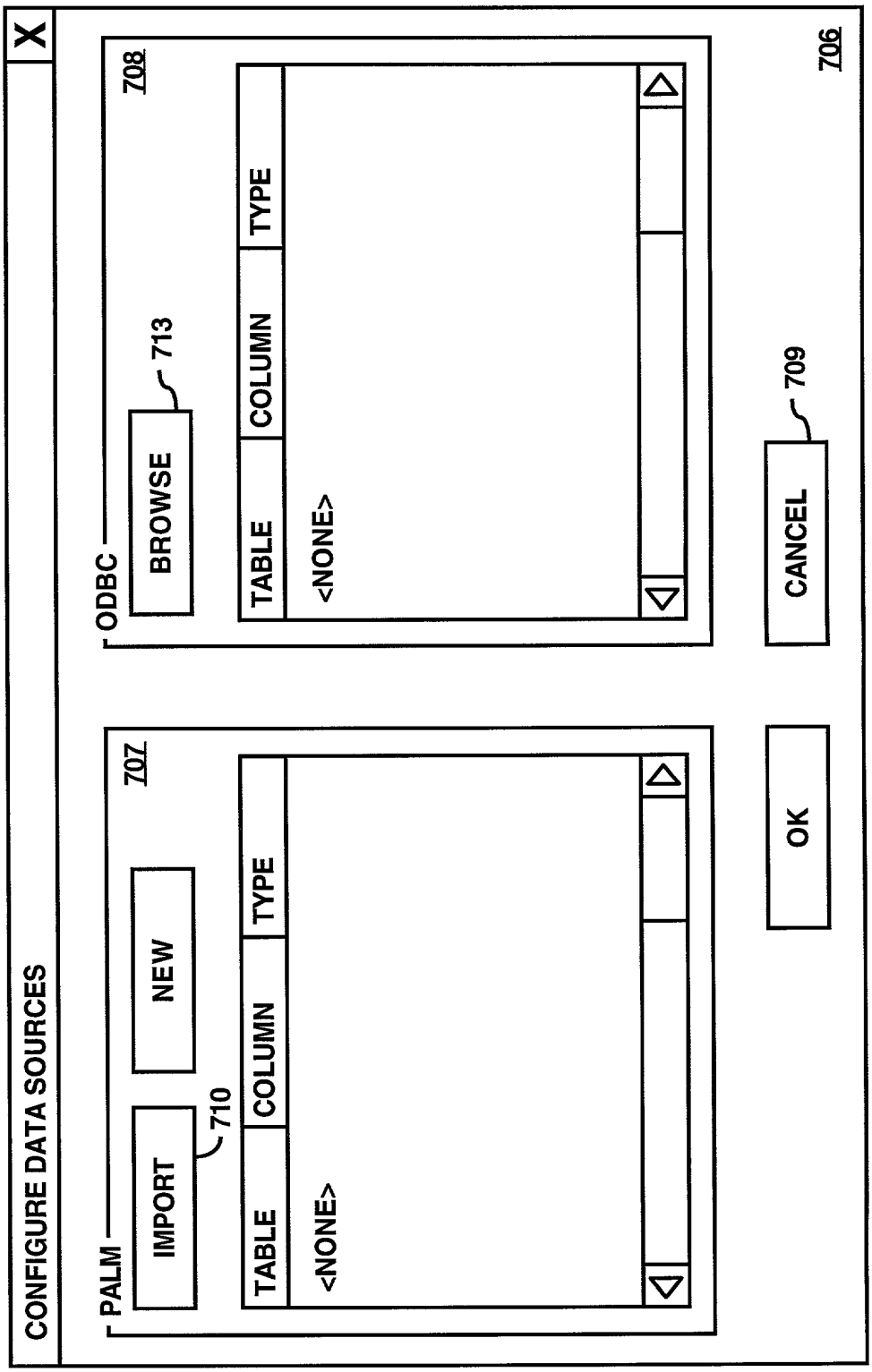
CONFIGURE DATA SOURCES
X
PALM
707
IMPORT
NEW
710
TABLE
COLUMN
TYPE
<NONE>
ODBC
708
BROWSE
713
TABLE
COLUMN
TYPE
<NONE>
OK
CANCEL
709
706

FIG. 7B

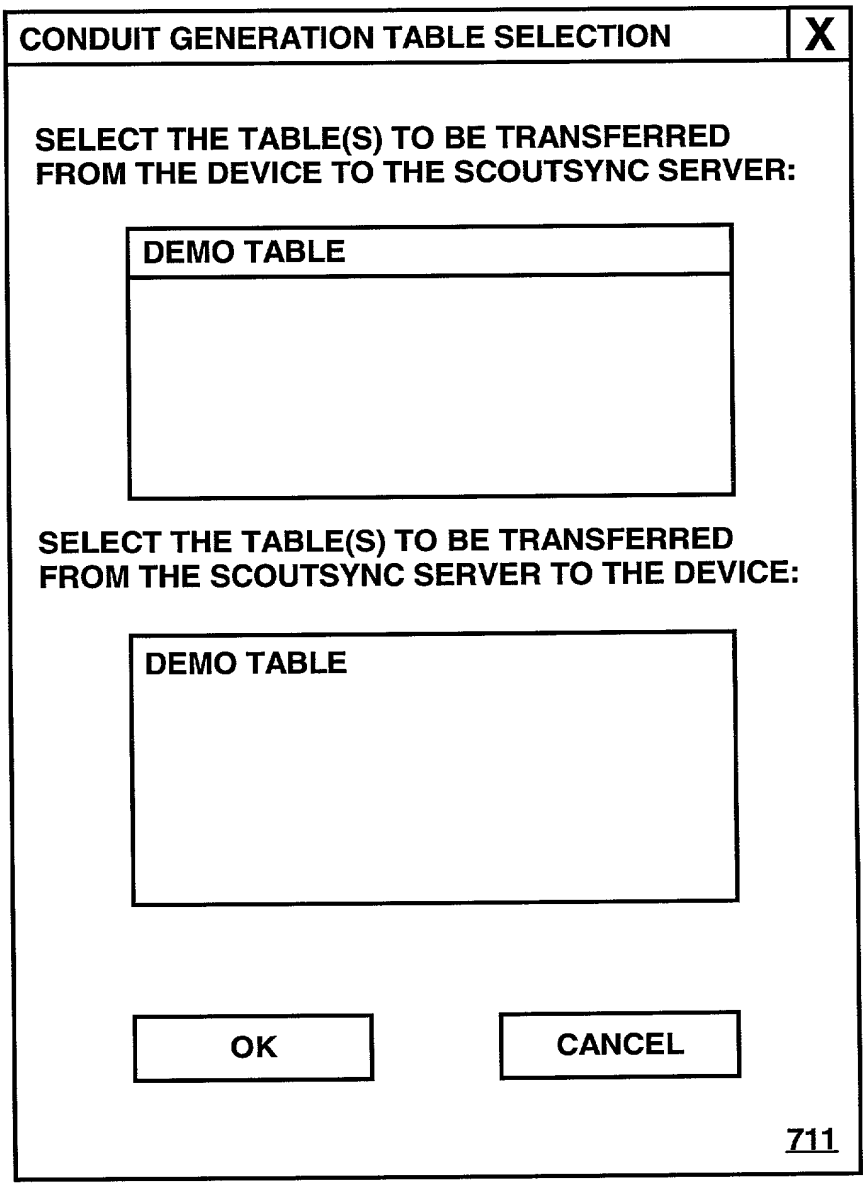
CONDUIT GENERATION TABLE SELECTION
X
SELECT THE TABLE(S) TO BE TRANSFERRED FROM THE DEVICE TO THE SCOUTSYNC SERVER:
DEMO TABLE
SELECT THE TABLE(S) TO BE TRANSFERRED FROM THE SCOUTSYNC SERVER TO THE DEVICE:
DEMO TABLE
OK
CANCEL
711

FIG. 7C

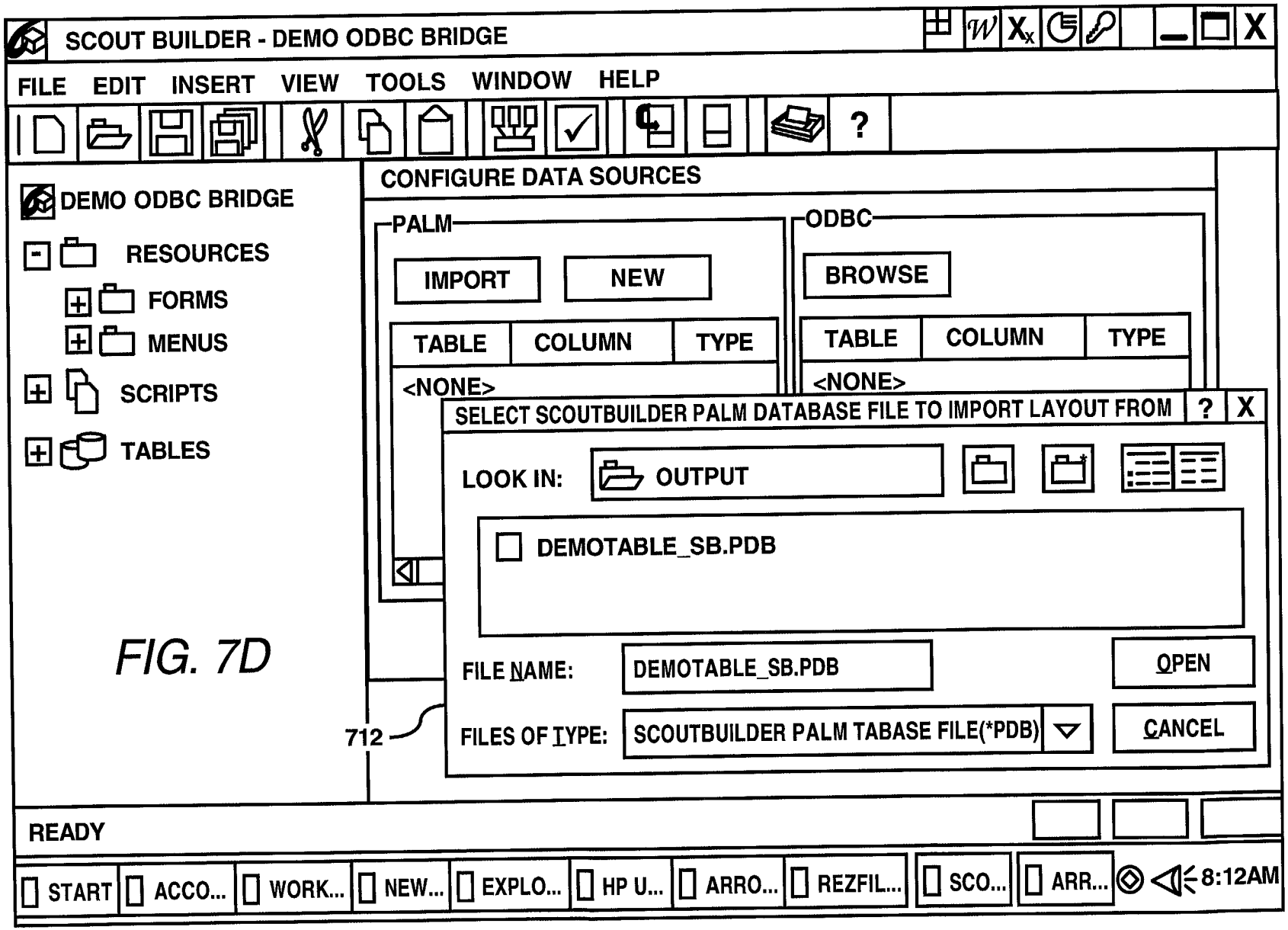
SCOUT BUILDER - DEMO ODBC BRIDGE
FILE EDIT INSERT VIEW TOOLS WINDOW HELP
DEMO ODBC BRIDGE
RESOURCES
FORMS
MENUS
SCRIPTS
TABLES
CONFIGURE DATA SOURCES
PALM
IMPORT
NEW
TABLE
COLUMN
TYPE
<NONE>
ODBC
BROWSE
TABLE
COLUMN
TYPE
<NONE>
SELECT SCOUTBUILDER PALM DATABASE FILE TO IMPORT LAYOUT FROM
LOOK IN:
OUTPUT
DEMOTABLE_SB.PDB
FILE NAME:
DEMOTABLE_SB.PDB
OPEN
FILES OF TYPE:
SCOUTBUILDER PALM TABASE FILE(*PDB)
CANCEL
712
READY
START
ACCO...
WORK...
NEW...
EXPLO...
HP U...
ARRO...
REZFIL...
SCO...
ARR...
8:12AM

FIG. 7D

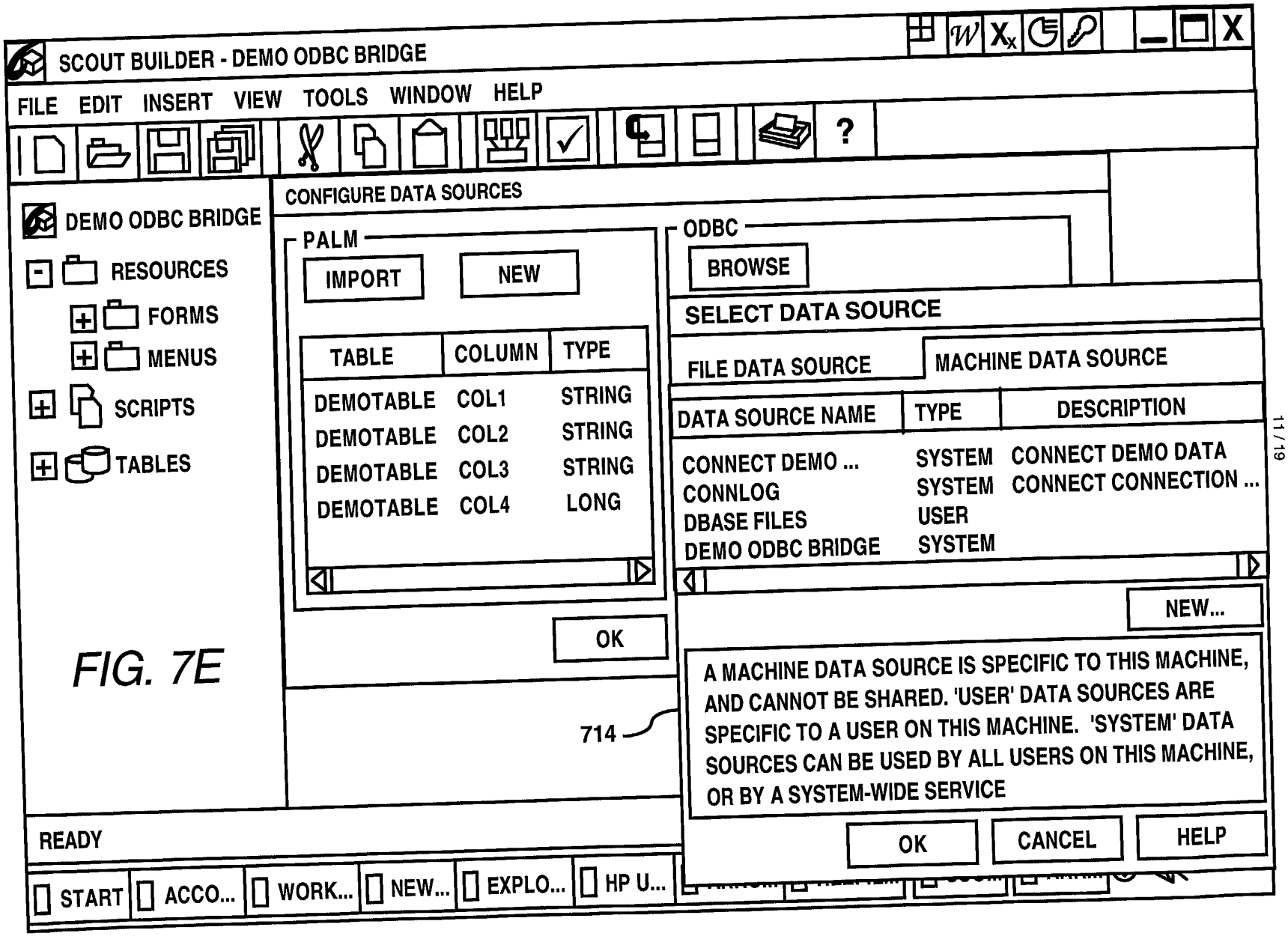
SCOUT BUILDER - DEMO ODBC BRIDGE
FILE EDIT INSERT VIEW TOOLS WINDOW HELP
DEMO ODBC BRIDGE
RESOURCES
FORMS
MENUS
SCRIPTS
TABLES
CONFIGURE DATA SOURCES
PALM
IMPORT
NEW
TABLE COLUMN TYPE
DEMOTABLE COL1 STRING
DEMOTABLE COL2 STRING
DEMOTABLE COL3 STRING
DEMOTABLE COL4 LONG
OK
ODBC
BROWSE
SELECT DATA SOURCE
FILE DATA SOURCE
MACHINE DATA SOURCE
DATA SOURCE NAME TYPE DESCRIPTION
CONNECT DEMO ... SYSTEM CONNECT DEMO DATA
CONNLOG SYSTEM CONNECT CONNECTION ...
DBASE FILES USER
DEMO ODBC BRIDGE SYSTEM
NEW...
A MACHINE DATA SOURCE IS SPECIFIC TO THIS MACHINE, AND CANNOT BE SHARED. 'USER' DATA SOURCES ARE SPECIFIC TO A USER ON THIS MACHINE. 'SYSTEM' DATA SOURCES CAN BE USED BY ALL USERS ON THIS MACHINE, OR BY A SYSTEM-WIDE SERVICE
OK
CANCEL
HELP
714
READY
START
ACCO...
WORK...
NEW...
EXPLO...
HP U...

FIG. 7E

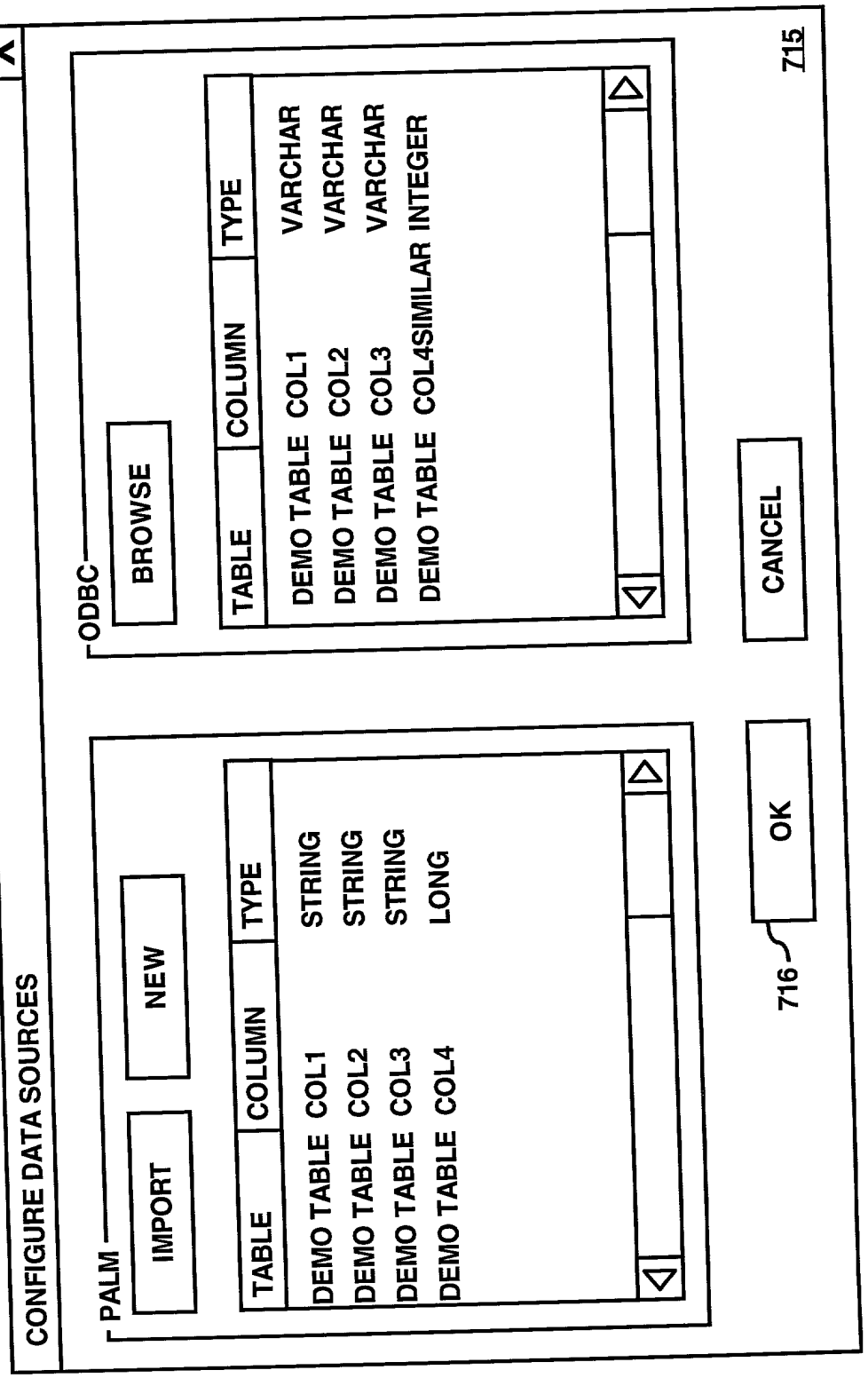
CONFIGURE DATA SOURCES
X
PALM
IMPORT
NEW
TABLE
COLUMN
TYPE
DEMO TABLE COL1 STRING
DEMO TABLE COL2 STRING
DEMO TABLE COL3 STRING
DEMO TABLE COL4 LONG
ODBC
BROWSE
TABLE
COLUMN
TYPE
DEMO TABLE COL1 VARCHAR
DEMO TABLE COL2 VARCHAR
DEMO TABLE COL3 VARCHAR
DEMO TABLE COL4SIMILAR INTEGER
716
OK
CANCEL
715

FIG. 7F

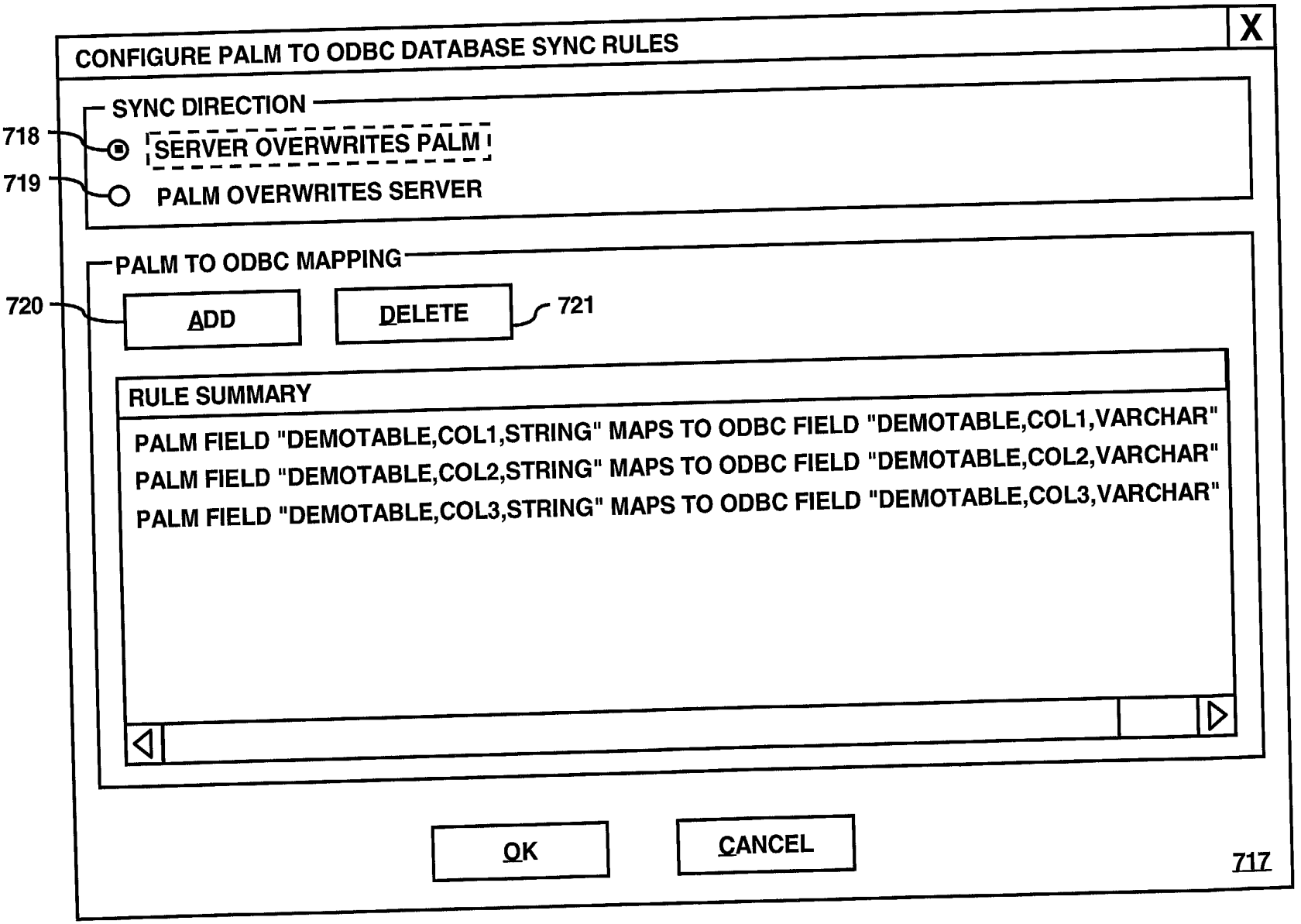
CONFIGURE PALM TO ODBC DATABASE SYNC RULES
X
SYNC DIRECTION
718
SERVER OVERWRITES PALM
719
PALM OVERWRITES SERVER
PALM TO ODBC MAPPING
720
ADD
DELETE
721
RULE SUMMARY
PALM FIELD "DEMOTABLE,COL1,STRING" MAPS TO ODBC FIELD "DEMOTABLE,COL1,VARCHAR"
PALM FIELD "DEMOTABLE,COL2,STRING" MAPS TO ODBC FIELD "DEMOTABLE,COL2,VARCHAR"
PALM FIELD "DEMOTABLE,COL3,STRING" MAPS TO ODBC FIELD "DEMOTABLE,COL3,VARCHAR"
OK
CANCEL
717

FIG. 7G

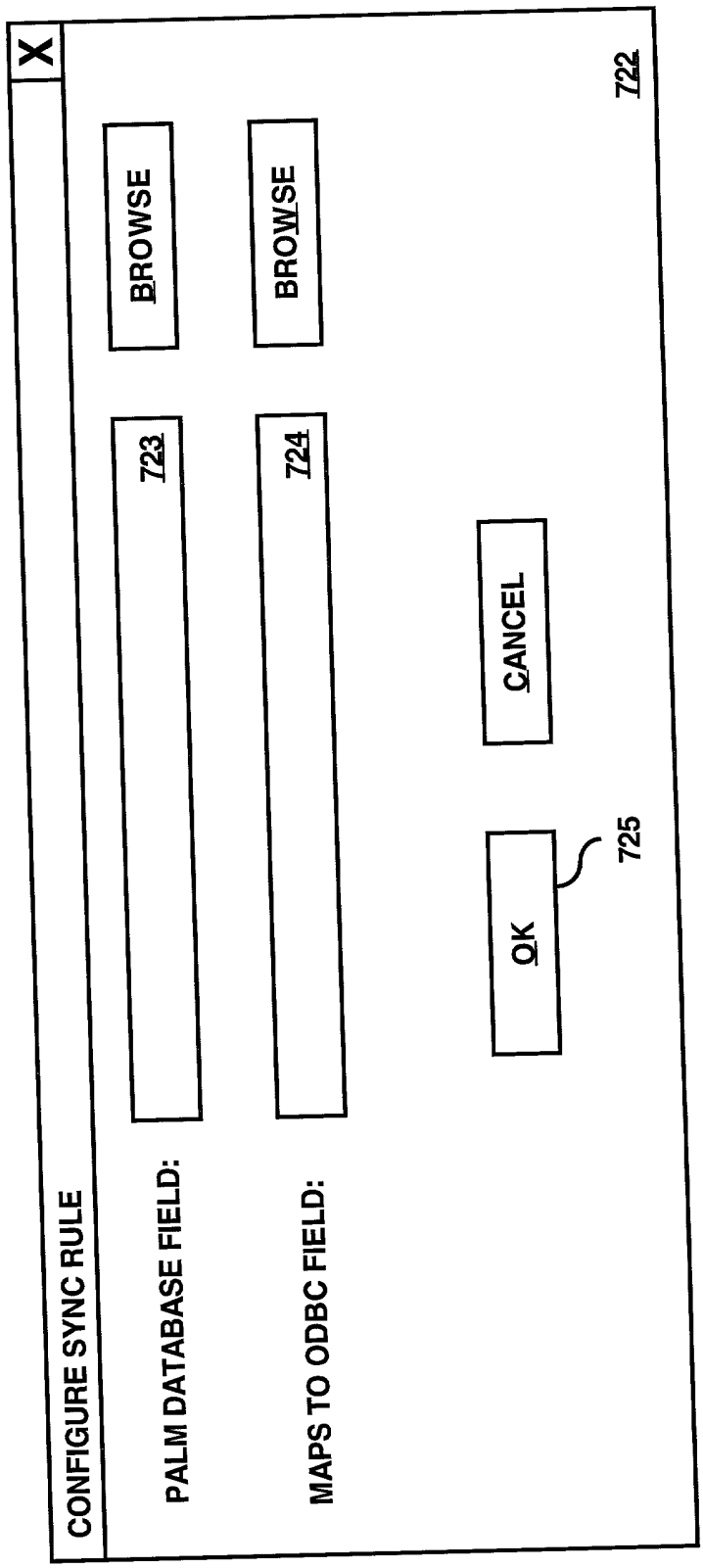
CONFIGURE SYNC RULE
X
PALM DATABASE FIELD:
MAPS TO ODBC FIELD:
BROWSE
BROWSE
723
724
OK
CANCEL
725
722

FIG. 7H

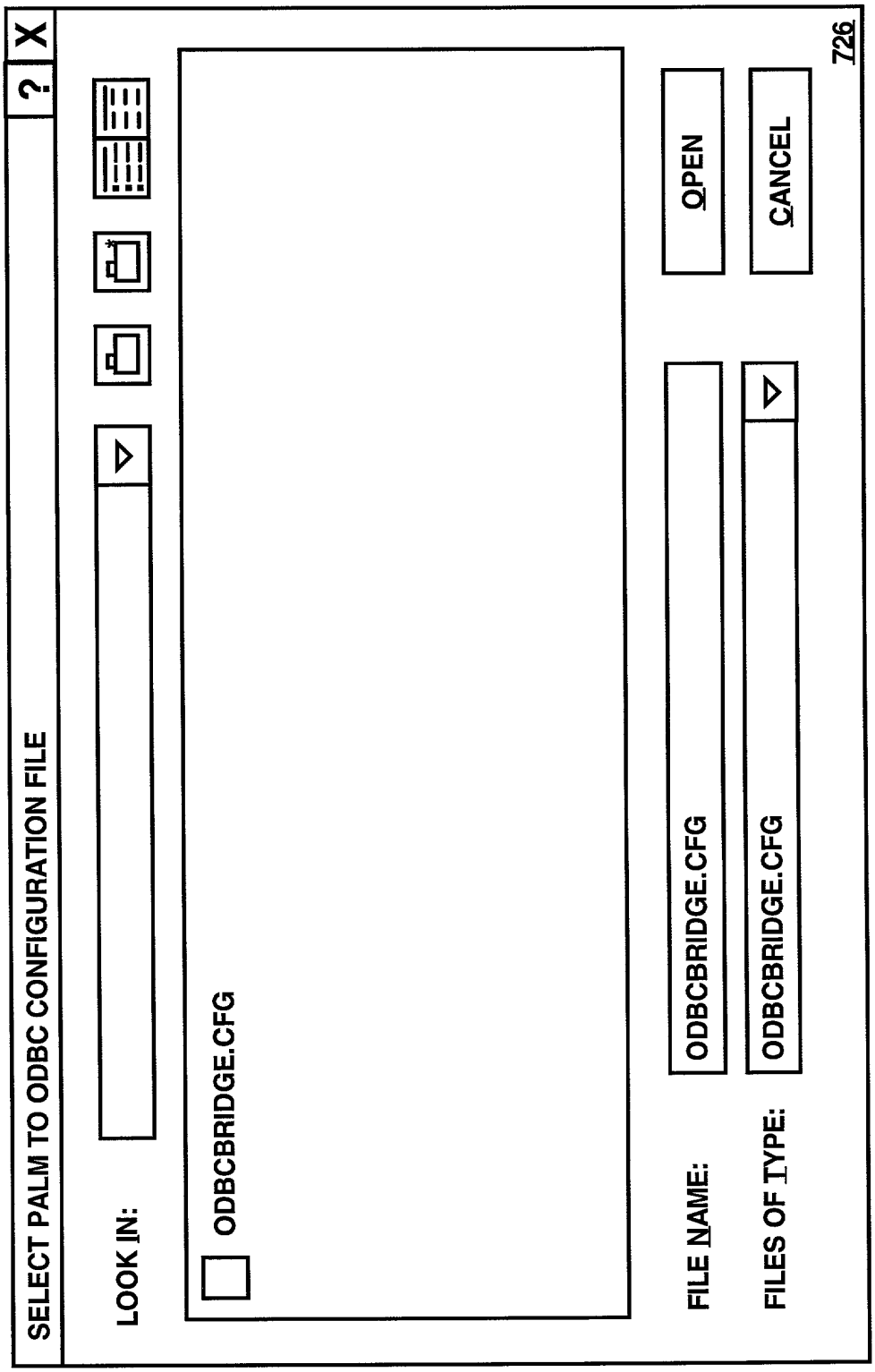
SELECT PALM TO ODBC CONFIGURATION FILE
?
X
LOOK IN:
ODBCBRIDGE.CFG
FILE NAME:
ODBCBRIDGE.CFG
FILES OF TYPE:
ODBCBRIDGE.CFG
OPEN
CANCEL
726

FIG. 7I

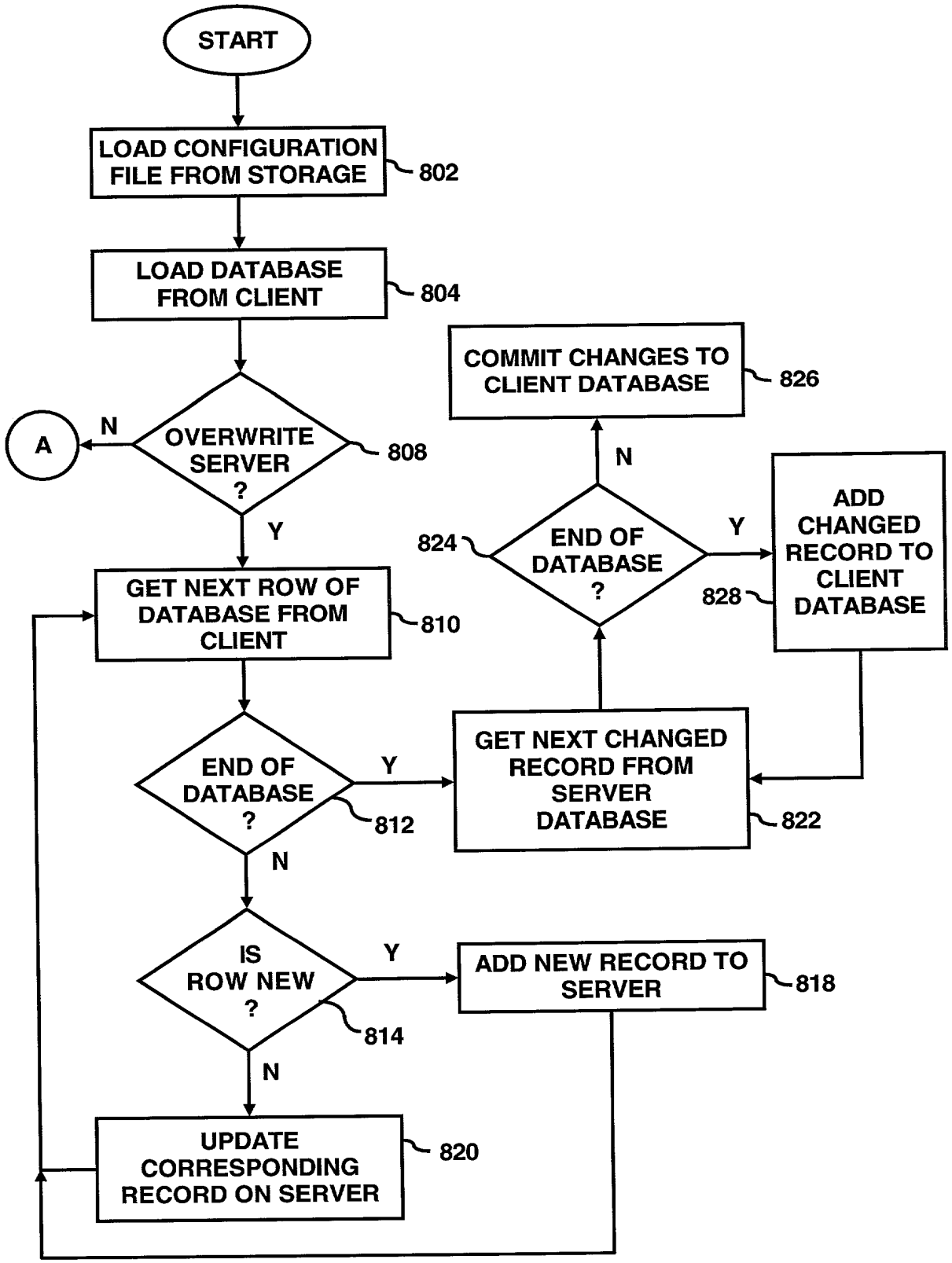
START
LOAD CONFIGURATION FILE FROM STORAGE
802
LOAD DATABASE FROM CLIENT
804
OVERWRITE SERVER ?
808
N
A
Y
GET NEXT ROW OF DATABASE FROM CLIENT
810
END OF DATABASE ?
812
Y
N
IS ROW NEW ?
814
Y
N
ADD NEW RECORD TO SERVER
818
UPDATE CORRESPONDING RECORD ON SERVER
820
GET NEXT CHANGED RECORD FROM SERVER DATABASE
822
END OF DATABASE ?
824
Y
N
ADD CHANGED RECORD TO CLIENT DATABASE
828
COMMIT CHANGES TO CLIENT DATABASE
826

FIG. 8A

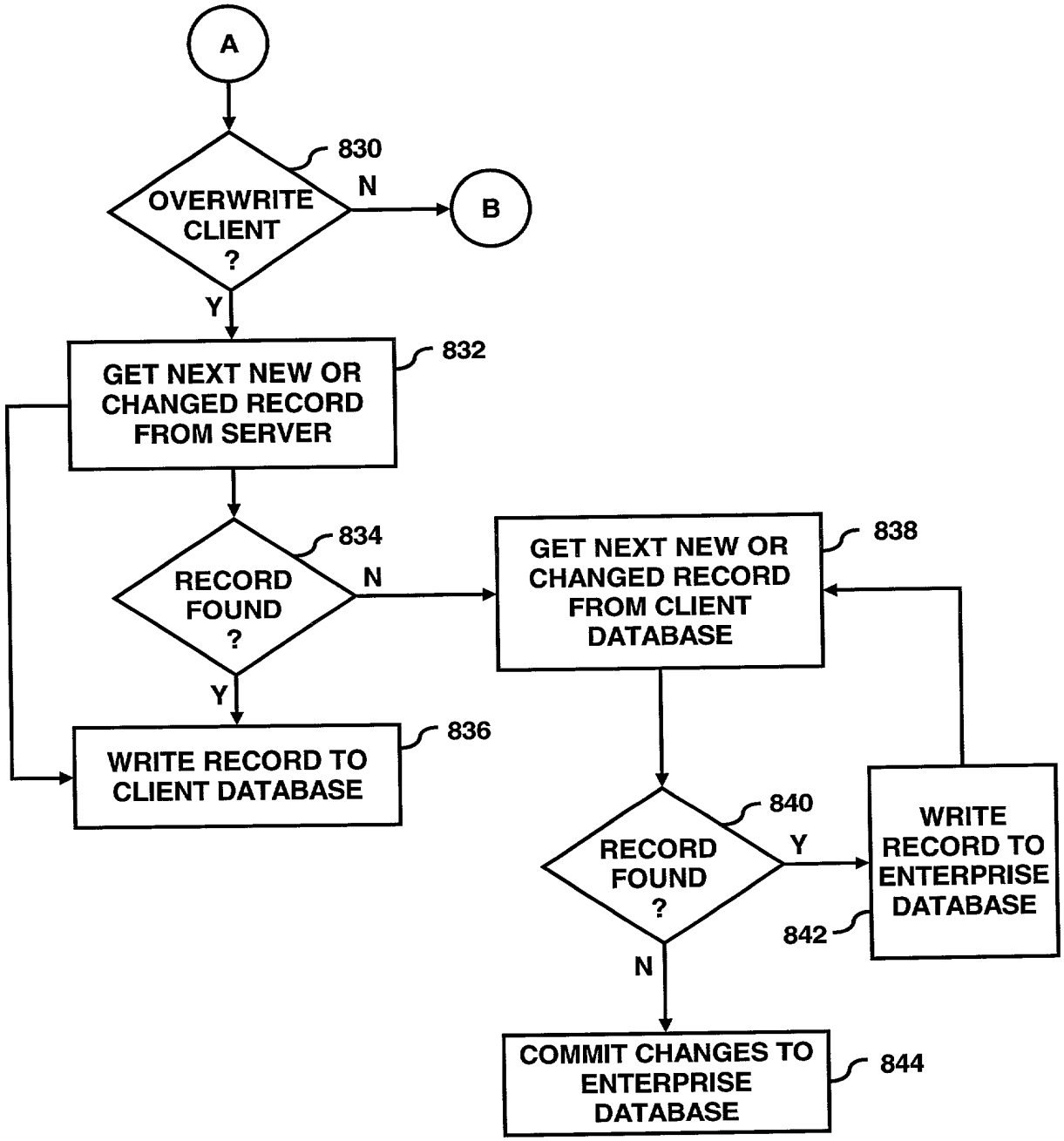
A
830
OVERWRITE CLIENT ?
N
B
Y
832
GET NEXT NEW OR CHANGED RECORD FROM SERVER
834
RECORD FOUND ?
N
838
GET NEXT NEW OR CHANGED RECORD FROM CLIENT DATABASE
Y
836
WRITE RECORD TO CLIENT DATABASE
840
RECORD FOUND ?
Y
WRITE RECORD TO ENTERPRISE DATABASE
842
N
COMMIT CHANGES TO ENTERPRISE DATABASE
844

FIG. 8B

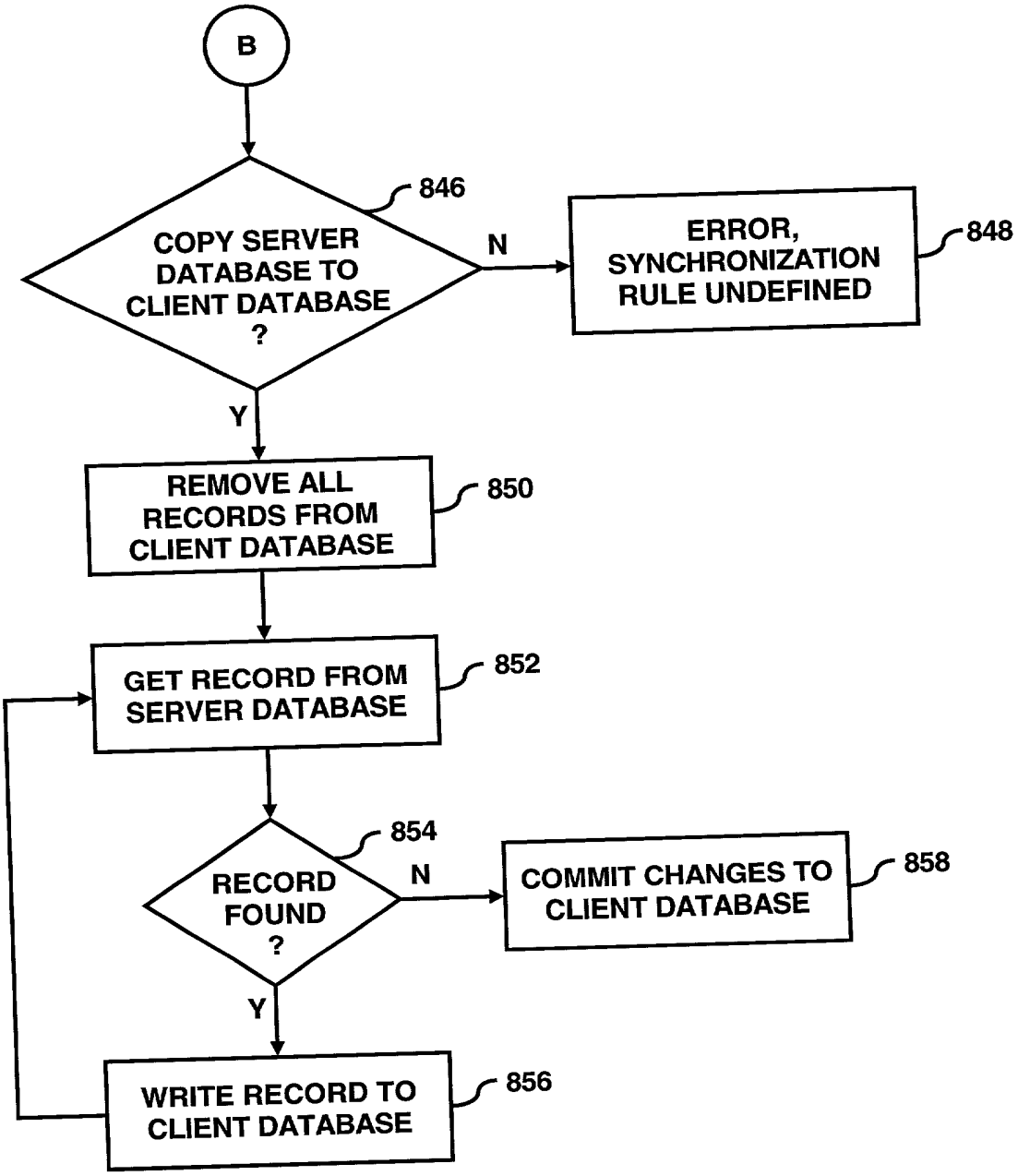
B
846
COPY SERVER DATABASE TO CLIENT DATABASE ?
N
ERROR, SYNCHRONIZATION RULE UNDEFINED
848
Y
REMOVE ALL RECORDS FROM CLIENT DATABASE
850
GET RECORD FROM SERVER DATABASE
852
854
RECORD FOUND ?
N
COMMIT CHANGES TO CLIENT DATABASE
858
Y
WRITE RECORD TO CLIENT DATABASE
856

FIG. 8C

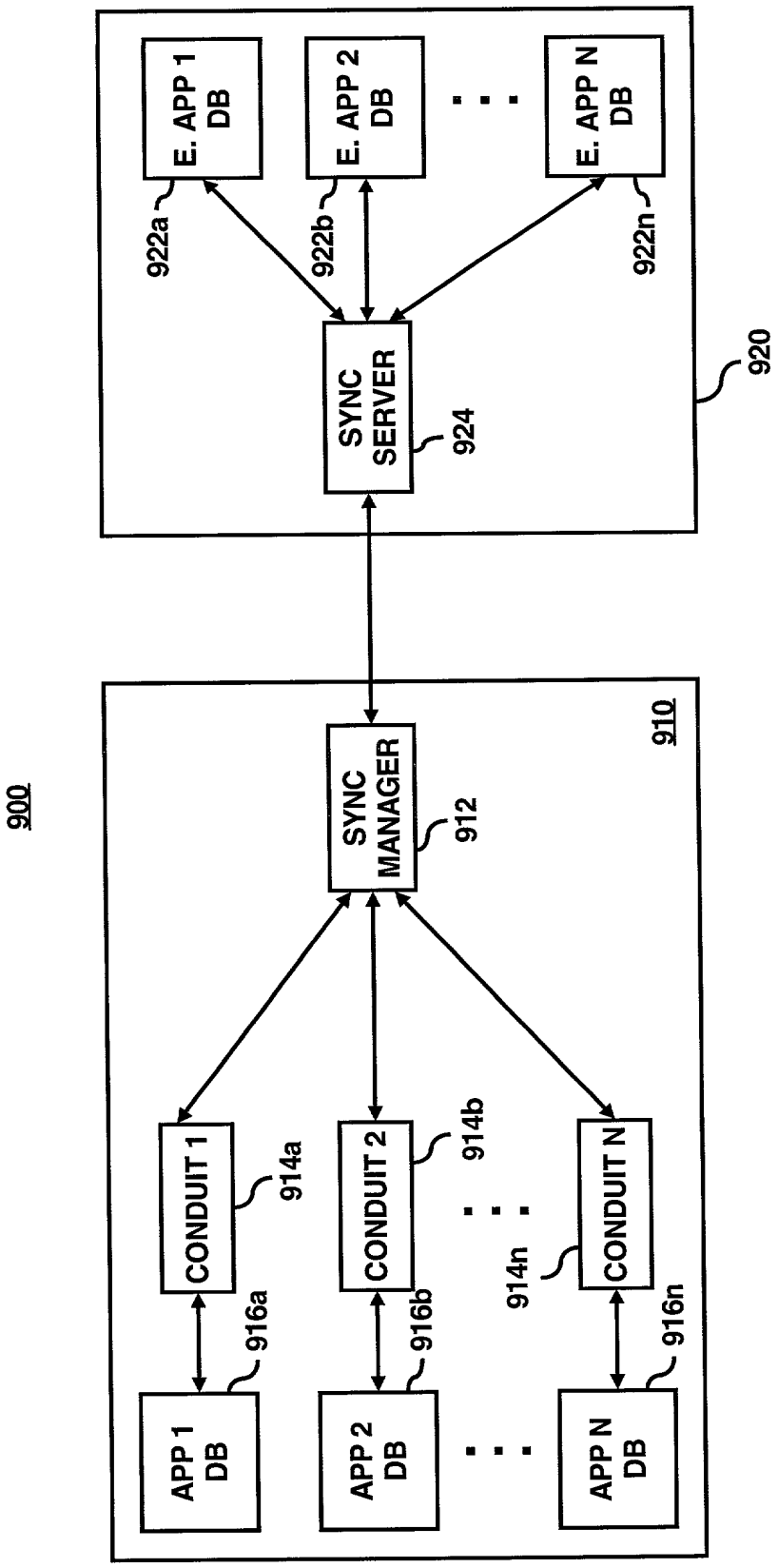

FIG. 9
PRIOR ART